

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An implantable fluid management device, comprising:
a catheter having a proximal end, a distal end, and an inner lumen extending therethrough;
a plurality of fluid entry ports formed in a sidewall of the catheter and in fluid communication with the inner lumen of the catheter; and
at least one fluid-impermeable barrier disposed in and occluding selected fluid entry ports, the at least one barrier being coupled to at least one conductor that is effective to deliver an electric current to the at least one barrier to selectively remove the barrier with respect to the selected fluid entry ports.
2. (Original) The device of claim 1, wherein the barrier is selected from the group consisting of a membrane, a cap, a plug, and a film.
3. (Original) The device of claim 1, further comprising:
a microprocessor coupled to the catheter and effective to selectively control the application of an electric current to one or more of the barriers to remove the barrier; and
a plurality of conductors effective to carry the electric current, each conductor extending from the microprocessor to one or more of the barriers.
4. (Original) The device of claim 3, wherein the microprocessor is effective to initiate removal of the barrier in response to a signal received from a remote device.
5. (Original) The device of claim 3, further comprising a sensor disposed adjacent to one or more of the selected fluid entry ports, the microprocessor being effective to initiate removal of the barrier upon detection of a particular condition detected by the sensor.
6. (Previously Presented) The device of claim 3, wherein the barrier is formed from a material selected from the group consisting of copper, gold, silver, zinc, and conductive polymers or copolymers.

7. (Original) The device of claim 1, wherein the plurality of fluid entry ports are arranged in rows that extend around a diameter of the catheter and that are positioned longitudinally apart from one another, each row including at least one fluid entry port.

8. (Currently Amended) The device of claim 7, further comprising a microprocessor coupled to the catheter effective to selectively remove the barrier on each fluid entry port in a particular row by controlling the application of an electric current to the barrier through of the at least one conductor, each conductor extending from the microprocessor to one or more of the barriers.

9. (Original) The device of claim 7, further comprising a plurality of filter members, each filter member extending transversely to a longitudinal axis of the catheter member and being positioned between two rows of fluid entry ports.

10. (Original) The device of claim 1, further comprising a filter material disposed around an inner diameter of the catheter and extending between the proximal and distal ends of the catheter.

11. (Previously Presented) A method of maintaining fluid flow through a catheter, comprising:

detecting a blockage of fluid-flow through a distal-most barrier-free row of fluid entry ports in a catheter;

activating a control member to send an electric current through at least one conductor to disintegrate at least one barrier from at least one fluid entry port positioned just proximal to the distal-most row of fluid entry ports; and

repeating the steps of detecting and activating as necessary.

12. (Cancelled).

13. (Previously Presented) The method of claim 11, wherein a microprocessor is coupled to the control member and initiates disintegration of the barrier in response to a signal from a remote device.

14. (Previously Presented) The method of claim 11, wherein a sensor disposed adjacent to one or more of the fluid ports detects a blockage of fluid-flow and communicates with the microprocessor to initiate disintegration of the barrier.
15. (Previously Presented) An implantable fluid management device, comprising:
a catheter having a proximal end, a distal end, and an inner lumen extending therethrough;
a plurality of fluid entry ports formed in a sidewall of the catheter and in fluid communication with the inner lumen of the catheter; and
a fluid-impermeable barrier coupled to the sidewall and occluding at least one of the fluid entry ports, the barrier being coupled to an energy source that is adapted to deliver energy to the barrier to selectively disintegrate the barrier with respect to the at least one fluid entry port.